

Appendix J-2

Shared Parking Analysis



MEMORANDUM

Date: February 17, 2021
To: Lionel Uhry, Mar Ventures
From: Vivian Lee and Tom Gaul
Subject: Pacific Coast Commons – Shared Parking Analysis

LA19-3078

Fehr & Peers conducted a shared parking analysis for the proposed Pacific Coast Commons (PCC) development. The objective of the shared parking analysis is to assess the potential parking demand of each of the three various sites of the project at full buildout to determine whether the proposed supply is adequate to meet peak demand. This report outlines the methodology used for the shared parking analysis, as well as the methodology used to determine the parking ratios used for the hotel and the residential land uses that is used in the shared parking analysis.

PROJECT DESCRIPTION

Pacific Coast Commons is proposed mixed-use development in the City of El Segundo consisting of 263 residential dwelling units and 11,000 square feet of commercial space. The project is just over ½-mile from the Metro Mariposa Green Line Station and is also serviced by several bus routes including two local Metro (Route 232 and 625), one local Beach Cities Transit (109), and two LADOT Commuter Express (Route 438, 574) routes. The residential buildings would provide a mix of 91 studio, 119 one-bedroom, and 47 two-bedroom units with parking provided in new parking structures. Six townhouse-style units are also proposed, each of which would provide individual garages. For the purpose of this analysis, the project is separated into three different sites, as follows:

- PCC North Site [Land Use Area 5]
 - 143 residential units (137 apartments & 6 townhomes)
 - 47 Studios
 - 67 One-Bedrooms
 - 23 Two-Bedrooms
 - 2,223 square feet of retail space
 - 253 total parking spaces
 - 241 parking spaces
 - 12 townhome parking spaces in individual garages

- PCC Fairfield Site [Land Use Area 3 & 4]
 - Fairfield Hotel (350 rooms, already in operation)
 - 3,273 square feet of retail space
 - 215 replacement parking spaces for the Fairfield Hotel



- PCC South Site [Land Use Area 1 & 2]
 - 120 residential units
 - 44 Studios
 - 52 One-Bedrooms
 - 24 Two-Bedrooms
 - 5,756 square feet of commercial space
 - 2,056 square feet of retail space
 - 3,700 square feet of fast casual restaurant
 - Aloft Hotel (246 rooms, already in operation)
 - 336 parking spaces

PARKING DEMAND MODEL

The shared parking analysis was conducted using methodology provided in the Urban Land Institute's (ULI) *Shared Parking, 2nd Edition*.¹ The model was calibrated and adjusted based on the current parking demand for the existing hotels at the site based on the empirical parking counts conducted in May 2019 and ITE parking ratios for multifamily residential properties. These include adjustments to specific base parking rates and time-of-day occupancy factors.

BACKGROUND ON URBAN LAND INSTITUTE'S SHARED PARKING

ULI sponsored a national study in 1984 that established a basic methodology for analyzing parking demand in mixed-use developments and developed averages for parking rates by land use. Fehr & Peers staff was involved in the 2004 update of this national study sponsored by ULI. The analysis presented in this memorandum uses data from the updated *Shared Parking, 2nd Edition* report.

Shared parking is a concept in which land uses in close proximity share a "pool" of available parking spaces in order to reduce the overall supply needed for the development as a whole. Shared parking is practical in situations where variations exist in vehicles by hour, by day, or season at individual land uses.

In the shared parking methodology, the base parking rate and daily/hourly/seasonal patterns for each land use are established, and then the overall parking demand is calculated by taking into account the unique travel characteristics of the project being analyzed. In this analysis, certain adjustments were made to the base parking rate and time-of-day occupancy factor.

The calibrated model was then used to estimate peak parking demand for the peak month of the year for each project site.

¹ *Shared Parking*. Urban Land Institute. (2004). <https://uli.bookstore.ipgbook.com/shared-parking-products-9780874202328.php>



PARKING DEMAND ASSUMPTIONS

To determine the parking demand for Pacific Coast Commons, the following assumptions were made:

- Each of the three garages can be utilized as “overflow” parking if needed due to one of the other sites parking demand exceeding its on-site supply.²
- Peak parking demand rates for the residential units was estimated based on data from the El Segundo Municipal Code parking requirements and the Institute of Transportation Engineers’ (ITE) *Parking Generation, 5th Edition*³; as discussed further below.
- The parking provided for residents of the townhouses in the individual garages were not included as part of the analysis, but guest parking for the townhouses were included in the shared parking calculation.
- The hotel peak parking demand rate was calculated using empirical data collected in May 2019 as part of this study at the Aloft and Fairfield hotels already operating onsite; as discussed further below.
- Peak parking demands for the retail and restaurant uses was estimated based on the El Segundo Municipal Code parking requirements for those uses.

RESIDENTIAL PARKING SUPPLY AND DEMAND RATE

Residential Parking Demand Research

To better understand the appropriate residential parking demand at Pacific Coast Commons, Fehr & Peers researched available data on parking demands at similar multifamily residential developments.

ITE Parking Generation Manual, 5th Edition

The Institute of Transportation Engineers published *Parking Generation, 5th Edition* in early 2019. The manual has traditionally provided parking demand rates for various land uses based on survey data collected in suburban, low-density areas. The 5th Edition includes additional survey data from Center City Core and Dense Multi-Use Urban locations as well. The latest survey information differentiates whether the survey data was collected within close proximity (½ mile) to rail transit. While the report does not provide authoritative findings, recommendations, or standards on parking demand, it is often referenced by planners and designers in making parking supply estimations and decisions.

Table 1 summarizes the parking supply recommendations from ITE for mid-rise multifamily housing developments. The General Urban/Suburban not within ½ mile of rail transit rates are the most conservative, although it should be noted that Pacific Coast Commons is located approximately ½ mile from the Metro Green Line Mariposa Station.

² Based on Conditional Use Permits approved by the El Segundo Planning Commission on October 9, 2014.

³ *Parking Generation, 5th Edition*. Institute of Transportation Professionals. (2019). <https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>



Table 1: Mid-Rise Multifamily Apartment Parking Generation Rates

Setting	Proximity to Rail Transit	Per Dwelling Unit	Per Bedroom
Center City Core	Within ½ mile of rail transit	1.1	1.0
Dense Multi-Use Urban	Within ½ mile of rail transit	1.2	0.9
	Not within ½ mile of rail transit	1.2	0.8
General Urban/Suburban	Within ½ mile of rail transit	1.5	0.8
	Not within ½ mile of rail transit	1.7	1.0

Palo Alto Multifamily Parking Demand Rate Study

Fehr & Peers conducted a study in April 2018 to provide the City of Palo Alto with parking demand rate data for multifamily developments. This report includes information from available reports, documents, studies, and the results of parking surveys conducted at multifamily developments as part of this study. Empirical data informed the parking demand rate information for market rate, affordable, and senior housing projects, as well as the change in parking demand when located near a robust transit system.

To begin, Fehr & Peers reviewed several reports and studies that included parking demand rates for multifamily market rate, affordable, and senior residential developments in the Bay Area. Fehr & Peers also conducted new parking surveys at nine multifamily complexes in the City of Palo Alto. Available information about each site, such as the number of units, walking distance (½ mile) to the nearest rail station, type of rail service, peak parking demand, parking supply and demand rates were documented. Parking occupancy surveys were conducted to count the numbers of parked vehicles by space type on a weekday (Tuesday, Wednesday, or Thursday) at three time periods (midday, evening, and late night – after midnight) and on a weekend day at two time periods (midday and late night).

Relevant conclusions for Pacific Coast Commons from the data collection effort, which includes all prior studies and the Palo Alto surveys are:

- For Market Rate units, the average surveyed parking demand rate is approximately 0.75 spaces per bedroom
 - Proximity to transit can reduce the rate by approximately 25 percent

El Segundo Municipal Code Parking Requirements

The El Segundo Municipal Code provides the number of required on-site parking spaces for the different land uses allowed within the city. Section 15-15-6 presents the following requirements for multifamily developments:

- Two spaces per dwelling unit
- One guest space for every 3 units (3-5 units = 1 visitor space, 6-8 units, 2 visitor spaces, etc.)



Table 2 summarizes the relevant parking data previously presented and applies it to the Pacific Coast Commons project. The table shows the projected demand based on the different parking rates.

Table 2: Summary of Parking Demand Rates

	Parking Spaces Per DU	Parking Spaces Per Bedroom	Pacific Coast Commons Parking Demand
ITE Parking Generation Manual	1.7	1.0	437 spaces (based on # of DUs); 304 spaces (based on # of bedrooms)
Palo Alto Multifamily Parking Demand Rate Study	N/A	0.75	228 spaces (based on # of bedrooms)
El Segundo Municipal Code Parking Requirements	2 per resident DU plus 1 guest space per 3 DUs	N/A	601 spaces (based on # of DUs)

Pacific Coast Commons Residential Parking Demand Rate

Based on the residential parking demand studies reviewed above, the following parking demand rates based on using a combination of ITE *Parking Generation* rates and El Segundo Municipal Parking requirements were used for the shared parking analysis:

- One resident space per bedroom
- One guest space for every 3 units (3-5 units = 1 visitor space, 6-8 units, 2 visitor spaces, etc.)

As shown in **Table 2**, this demand rate for the Pacific Coast Commons is conservative when compared to other similar projects (market rate, outside the ½ mile rail, etc.). Assuming that the demand is equal to the El Segundo Municipal Code requirements or the ITE rates based on dwelling units would likely result in an oversupply of parking and underutilization of spaces.

Table 3 shows the total parking demand based on the above demand rate.

Table 3: Pacific Coast Commons Residential Parking Demand

Land Use	Proposed Parking Rate	Size	Proposed Vehicle Spaces
Residential			
Studio	1 space/ bedroom	91 bedrooms	91
1 Bedroom	1 space/ bedroom	119 bedrooms	119
2 Bedroom	1 space/ bedroom	94 bedrooms	94
Guest	1 space/ 3 units [a]	263 units	87
Total			391



Parking demand for residents is projected to be 304 spaces. Demand for residential guests is estimated to be 87 spaces, for a total demand of 391 parking spaces.

Pacific Coast Commons Residential Parking Supply

However, the Pacific Coast Commons project is proposing to provide parking using a modified residential parking requirement, based on unit type/number of bedrooms, which is more conservative than the demand rate. The follow parking supply is proposed:

- One space per studio unit
- 1.5 spaces per one-bedroom unit
- Two spaces per two-bedroom unit
- One guest space for every 3 units (3-5 units = 1 visitor space, 6-8 units, 2 visitor spaces, etc.)

Table 4 shows the proposed parking supply based on the above modified residential parking requirements.

Table 4: Pacific Coast Commons Proposed Residential Parking Supply

Land Use	Proposed Parking Rate	Size	Proposed Vehicle Spaces
Residential			
Studio	1 space/ unit	91 units	91
1 Bedroom	1.5 space/ unit	119 units	179
2 Bedroom	2 space/ unit	47 units	94
Guest	1 space/ 3 units	263 units	87
Total			451

Based on the proposed parking supply rates, 364 total spaces would be supplied for residential tenant use. The estimated demand for the residents is 304 spaces, which projects an oversupply of 60 spaces. Guest parking would be provided in the shared pool of parking.



HOTEL PARKING DEMAND RATE

Although hotel rates are available from ITE, these rates are highly variable. Since the hotels for this project are currently in operation, Fehr & Peers conducted an empirical analysis of the existing parking demands at the Fairfield and Aloft Hotels, in place of using the ITE rates.

Existing Parking Supply

A series of parking lots currently serve the Fairfield Hotel and the Aloft Hotel. The “North” parking lot, located north of Mariposa Avenue, provides 232 parking spaces. This parking lot is currently gate controlled. The on-site parking lot at the Fairfield Hotel provides 33 parking spaces. The Aloft Hotel parking lot, located north of Holly Avenue, provides 165 parking spaces. The Conditional Use Permit for the hotels allows the Fairfield and Aloft Hotels to share the parking in the North parking lot north of Mariposa Avenue; therefore, the series of parking lots is viewed in this analysis as a system containing a total of 430 parking spaces. All parking lots are utilized by hotel guests and employees.

Existing Parking Occupancy

Parking utilization counts were conducted at the parking lots serving the Fairfield Hotel and the Aloft Hotel on Thursday, May 2nd and Sunday, May 5th, 2019, at 2:00 AM. These days and times were selected as they represent the busiest weekday night and weekend night on average for both hotels.

Table 5 shows the occupied spaces at each parking lot on both nights. On Wednesday night/early Thursday morning, the North parking lot was 53% occupied, the Fairfield on-site parking lot was 58% occupied, and the Aloft parking lot was 61% occupied. In total, the three lots combined were 56% occupied. On Saturday night/early Sunday morning, the North parking lot was 69% occupied, the Fairfield on-site parking lot was 45% occupied, and the Aloft parking lot was 56% occupied. In total, the three lots combined were 62% occupied. Count sheets can be found in **Appendix A**.



Table 5: Hotel Parking Utilization

Thursday, May 2, 2019 - 2:00 AM					
Lot	Regular	Handicap	Total Spaces Occupied	Total Spaces	% Occupied
North	123	0	123	232	53%
Fairfield	17	2	19	33	58%
Aloft	98	2	100	165	61%
Sunday, May 5, 2019 - 2:00 AM					
Lot	Regular	Handicap	Total Spaces Occupied	Total Spaces	% Occupied
North	158	1	159	232	69%
Fairfield	13	2	15	33	45%
Aloft	91	2	93	165	56%

Hotel Room Occupancy

Because of the hotels' close proximity to the Los Angeles International Airport (LAX), a portion of rooms are occupied by flight crews on any given night. On the Wednesday night, the Fairfield Hotel was 94% occupied (330 out of 350 rooms) and the Aloft Hotel was 98% occupied (242 out of 246 rooms). Of the total occupied rooms at the Fairfield and Aloft Hotels, 47% and 19% were occupied by flight crews, respectively. On the Saturday night, the Fairfield Hotel was 76% occupied (265 out of 350 rooms) and the Aloft Hotel was 75% occupied (184 out of 246 rooms). Of the total occupied rooms at the Fairfield and Aloft Hotels, 54% and 22% were occupied by flight crews, respectively. **Table 6** shows the number of total occupied rooms.



Table 6: Hotel Room Occupancy

Thursday, May 2, 2019 - 2:00 AM			
Hotel	Total Rooms Available	Total Rooms Occupied	Total % Occupied
Fairfield	350	330	94%
Aloft	246	242	98%
Sunday, May 5, 2019 - 2:00 AM			
Hotel	Total Rooms Available	Total Rooms Occupied	Total % Occupied
Fairfield	350	265	76%
Aloft	246	184	75%

Hotel Parking Demand Rates

Table 7 shows the empirical hotel parking demand rates. The parking demand rates were calculated using the total number of parking spaces occupied and total rooms occupied. Due to the Conditional Use Permit for the hotel allowing the Fairfield and Aloft Hotels to share parking in the parking lot north of Mariposa Avenue, a combined demand rate was developed across both properties. On Wednesday night, the combined demand rate was 0.42 per occupied room. On Saturday night, the combined demand rate was 0.59 per occupied room.

Table 7: Hotel Parking Demand Rate

Thursday, May 2, 2019 - 2:00 AM			
Hotel	Total Spaces Occupied	Total Rooms Occupied	Occupied Spaces per Occupied Room
Fairfield & Aloft Combined	242	572	0.42
Sunday, May 5, 2019 - 2:00 AM			
Hotel	Total Spaces Occupied	Total Rooms Occupied	Occupied Spaces per Occupied Room
Fairfield & Aloft Combined	267	449	0.59



Both hotels have a higher demand rate on the weekend than weekday, even though more rooms are occupied during the weekday. This is likely due to more families/tourists staying at the hotel during the weekends and having personal/rental cars with them. During the week, the hotel guests are more likely to be there for business and utilize ride sharing vehicles for their stay. Similarly, the flight crews which stay at the hotel often during the week do not need parking spaces.

Parking Demand at Full Hotel Occupancy

The number of spaces occupied assuming full hotel occupancy was calculated using the higher observed demand rate for the entire site, which occurred on the weekend. At the Fairfield Hotel, 207 spaces are projected to be demanded when the hotel is at full occupancy. At the Aloft Hotel, 145 spaces are projected to be demanded when the hotel is at full occupancy. This is shown in **Table 8**. The overall demand for parking is 352 spaces when both the Fairfield and Aloft are at full room capacity.

Table 8: Peak Hotel Parking Demand at Full Occupancy

Hotel	Peak Demand Rate	Hotel Rooms	Peak Parking Demand at Full Occupancy
Fairfield	0.59	350	207
Aloft	0.59	246	145
Total	0.59	596	352



SHARED PARKING ANALYSIS PARAMETERS

In order to evaluate the number of spaces needed under shared parking conditions, a number of characteristics regarding a particular development must be known. The most important of these characteristics are the mix of land uses within the project and the size of each individual land use. The other parking-related factors that must be estimated in order to determine peak parking demand by-hour are described below.

PARKING RATIO

As described earlier in the report, parking ratios for the existing hotels were developed based on the counts conducted in May 2019. For the residential land use, a combination of ITE *Parking Generation* rates and El Segundo Municipal Parking requirements were used based on the literature review discussed previously. For the commercial land uses, El Segundo Municipal Parking requirements were used.

Table 9 shows a summary of base parking rates used in the parking demand model for each of the components. The table also notes the source for each parking ratio.

Table 9: Pacific Coast Common Parking Rates

Land Use Component	Parking Rate
Aloft Hotel [1]	0.59 spaces per occupied room
Fairfield Hotel [1]	0.59 spaces per occupied room
Multifamily Residential [2]	1 space per bedroom
Residential Guest Parking [3]	1 space for every third unit
Fast Casual Restaurant [3]	1 space for each 75 ft of dining area; 1 space for each 250 ft of nondining area
Retail [3]	1 space for each 300 ft

[1] Empirical data collected onsite at the hotels on a weekday (May 2, 2019) and weekend (May 5, 2019). Parking ratio was determined by dividing the number of occupied spaces being used overnight by the number of occupied hotel rooms. A combined demand rate was developed as the Fairfield and Aloft hotels share overflow parking at the parking lot north of Mariposa Avenue.

[2] Rate was taken from *ITE Parking Generation, 5th Edition* for mid-rise multifamily apartments in general urban/suburban settings and that are not within ½ mile of rail transit.

[3] Rates from parking requirements in Section 15-15-6 of El Segundo Municipal Code.



RESIDENTIAL PARKING

Based on the projected residential demand and the modified residential parking supply, Pacific Coast Commons is projected to have an oversupply of 60 residential parking spaces. Per the *Pacific Coast Commons Specific Plan*, up to five percent of the total non-guest multi-family residential parking is permitted to be shared with commercial uses.⁴ Therefore, five non-guest multi-family residential parking spaces from the North Site and five non-guest multi-family residential spaces from the South Site will be included for use in the shared parking supply.

GUEST PARKING

In accordance with City of El Segundo Municipal Code requirements, guest parking was presumed to be provided in addition to the parking for the residential units. One guest parking space is required to be supplied for every three multifamily units.

MODE SPILT/INTERNAL CAPTURE

To be conservative for the shared parking analysis, no adjustments were made for mode spilt or internal capture.

AUTO OCCUPANCY

This shared parking analysis used the national averages for auto occupancy for all land uses. No changes were made to the ULI average auto occupancy rates.

TIME-OF-DAY PATTERNS

Time-of-day occupancy assumptions were adjusted for the Aloft and Fairfield hotels to estimate the guest and employee split during late (after 9pm) evening hours. Late evening hours are when hotel guests are anticipated to be settled into their rooms, but hotel staff is slowly decreasing into the morning hours. For other uses, ULI-recommended time-of-day factors were used.

SEASONAL VARIATIONS

The parking demand model takes into consideration the variation in activity for each of the land uses from month-to-month. ULI-recommended seasonal factors, which incorporate variations in travel during seasonal periods such as holiday shopping in the winter, were used.

⁴ *Pacific Coast Commons Specific Plan*. City of El Segundo (2021).



PARKING DEMAND PROJECTIONS

Because each of the three garages will be utilized as “overflow” parking if needed, the project was analyzed as one combined site. While each individual site’s peak parking demand occurs at different hours, it was determined that the peak parking demand for the three sites combined would occur at 10:00 PM on a weekday (in June). Shared parking analysis worksheets for each site can be found in the **Appendix B. Table 10** summarizes the proposed parking supply by site and total. **Table 11** summarizes the estimated peak demand.

Table 10: Pacific Coast Common Parking Supply

Site	Parking Supply	Residential Reserved	Shared Spaces
North	241	189	52
Fairfield	215	0	215
South	336	165	171
Total	792	354	438

Table 11: Pacific Coast Common Parking Peak Demand, Weekday, June at 10 PM

Area	Residential Demand	Shared Use Demand				Total Shared Demand	Shared Surplus/ Deficit
		Residential Guest	Hotel	Retail	Restaurant		
North	160	48	0	1	0	49	3
Fairfield	0	0	188	3	0	191	24
South	144	40	133	1	18	192	-21
Total	304	88	321	5	18	432	6

PCC NORTH SITE

As shown in **Table 10**, the project proposes 241 parking spaces for the North Site, with 189 parking spaces reserved for exclusively for residential tenant use. The remaining 52 spaces would be shared between the residential guest parking, commercial uses, and for overflow if needed from the other sites.

As summarized in **Table 11**, the North site is projected to have a peak residential parking demand of 160 parking spaces and a peak shared parking demand of 49 spaces. As such, the North site is projected to have a surplus of three shared parking spaces during the peak demand period.



PCC FAIRFIELD SITE

The Fairfield site's peak parking shared demand is estimated to be 191 spaces. As shown in **Table 11**, the project proposes 215 parking spaces, indicating sufficient supply for the anticipated demand with a surplus of 24 spaces during the peak demand period.

PCC SOUTH SITE

As shown in **Table 10**, the project proposes 336 parking spaces for the South Site, with 165 parking spaces reserved for exclusively for residential tenant use. The remaining 171 spaces would be shared between the residential guest parking, commercial uses, and for overflow if needed from the other sites. As summarized in **Table 11**, The South site is estimated to have a peak residential parking demand of 144 parking spaces and a peak shared parking demand of 192 spaces. As such, the South site would have a deficit of 21 shared parking spaces during the peak demand period. The excess demand can be accommodated by the surplus of spaces at the North and Fairfield sites, which have a combined surplus of 27 spaces.

CONCLUSION

The shared parking analysis demonstrates that sufficient parking would be provided to meet the demand of the various uses on-site.

It is anticipated that retail/restaurant patrons will be provided with free validated parking in the structures, hotel guests will continue to be charged for parking, and residents will not be charged a separate parking fee from their base rental rate. A before and after study could be conducted on the adjacent residential streets to understand if the project has an effect on street parking. Based on the results of the study and if desired by the City and the residents in the adjacent neighborhoods, a residential parking district could be implemented to deter non-residential users from parking on the street.



PROJECT CONSTRUCTION PARKING DEMAND ANALYSIS

A parking analysis was also conducted for the Pacific Coast Commons construction period to understand the parking needs of construction employees and uses on-site. Phase 1 will construct the replacement parking for the Fairfield Inn & Suites site adjacent to the existing hotel. Phase 2 will consist of the construction of the South site. Phase 3 will consist of the buildout of the North site.

Construction will be phased based on two potential timelines. The first scenario analyzed is based on a sequential timeline with three separate phases. The second scenario analyzes a construction timeline in which Phase 2 and 3 will be constructed concurrently.

The shared parking analysis in **Appendix B** was used to determine the peak parking demand for each phase during construction hours. El Segundo Municipal Code (ESMC) limits construction activities to the hours from 7:00 AM to 6:00 PM Monday through Saturday, with no construction permitted on Sundays or holidays.

SEQUENTIAL CONSTRUCTION TIMELINE

Under a sequential timeline, Phase 1 of development will construct the replacement parking and new retail for the Fairfield Inn & Suites site adjacent to the existing hotel. During Phase 1, the Aloft and Fairfield Hotels will continue to be in operation. The second phase would consist of the construction of the South site, which consists of residential, retail, and parking. During Phase 2, both hotels will continue to operate, and new retail built in Phase 1 will be occupied. The third phase of development would consist of the buildout of the North site. During Phase 3, the retail and residential built on the South site in Phase 2 is assumed to be fully occupied.

During Phase 1 of construction, Fairfield and Aloft hotel guests would continue to park at the existing surface lots at their respective sites. The existing Fairfield surface lot has 232 parking spaces and the existing Aloft surface lot has 165 parking spaces, for a total of 397 parking spaces. Peak parking demand is estimate to occur on a weekday in June at 8:00 AM during Phase 1⁵. A peak demand of 171 parking spaces for the Fairfield Hotel and 119 parking spaces for the Aloft hotel will need to be accommodated, along with a peak demand of 60 construction employee parking spaces. As shown in **Table 12**, the total anticipated demand of 350 spaces can be accommodated by the existing 397 parking spaces, with a surplus of 47 spaces.

⁵ For the purpose of this analysis, the month of June was used to determine peak parking demand for all phases of construction as it is the peak demand month and provides the most conservative results.



Table 12: Sequential Construction Phase 1 Parking Demand

Site	Retail	Hotel	Construction	Total Demand	Total Supply
North	-	-	-	-	232
Fairfield	-	171	60	231	-
South/Aloft	-	119	-	119	165
Total Overall	0	290	60	350	397

Once Phase 1 is completed, parking for the Fairfield site can be moved into the newly constructed garage, which will have 215 spaces. During Phase 2 of construction, Aloft parking can be accommodated via the existing surface lot of 232 spaces at the North site. Peak parking demand is estimated to occur on a weekday in June at 8:00 AM during Phase 2. A peak demand of 173 parking spaces for the Fairfield Hotel and newly constructed retail and 119 parking spaces for the Aloft hotel will need to be accommodated, along with a peak demand of 75 construction employee parking spaces. As shown in **Table 13**, the total demand of 367 spaces can be accommodated by the 447 parking spaces supplied, with a surplus of 80 spaces.

Table 13: Sequential Construction Phase 2 Parking Demand

Site	Retail	Hotel	Construction	Total Demand	Total Supply
North	-	-	-	-	232
Fairfield	2	171	-	173	215
South/Aloft	-	119	75	194	-
Total Overall	2	290	75	367	447

Once Phase 2 is completed, newly constructed uses will be able to park at the new South site garage of 336 spaces, in addition to the 215 spaces provided at the Fairfield garage constructed during Phase 1. Peak parking demand is estimated to occur on a weekday in June at 5:00 PM during Phase 3. A peak demand of 169 parking spaces for the Fairfield Hotel and newly constructed retail and 280 parking spaces for the uses on the South site will need to be accommodated, along with peak demand of 75 construction employee parking spaces. As shown in **Table 14**, the total demand of 524 spaces can be accommodated by the 551 parking spaces supplied, with a surplus of 27 spaces.



Table 14: Sequential Construction Phase 3 Parking Demand

Site	Residential	Retail	Hotel	Construction	Total Demand	Total Supply
North	-	-	-	75	75	-
Fairfield	-	8	161	-	169	215
South/Aloft	138	29	113	-	280	336
Total Overall	138	37	274	75	524	551

CONCURRENT CONSTRUCTION TIMELINE

Under a concurrent timeline, Phase 1 of development will construct the replacement parking and new retail for the Fairfield Inn & Suites site adjacent to the existing hotel. During Phase 1, the Aloft and Fairfield Hotels will continue to be in operation. Phase 2 and 3 would occur concurrently and would consist of the construction of the South site and the North site. During the construction of these two sites, both hotels will continue to operate, and new retail built in Phase 1 will be occupied.

During Phase 1 of construction, Fairfield and Aloft hotel guests would continue to park at the existing surface lots at their respective sites. The existing Fairfield surface lot has 232 parking spaces and the existing Aloft surface lot has 165 parking spaces, for a total of 397 parking spaces. Peak parking demand is estimated to occur on a weekday in June at 8:00 AM during Phase 1. A peak demand of 171 parking spaces for the Fairfield Hotel and 119 parking spaces for the Aloft hotel will need to be accommodated, along with a peak demand of 60 construction employee parking spaces. As shown in **Table 15**, the total demand of 350 spaces can be accommodated by the existing 397 parking spaces, with a surplus of 47 spaces.

Table 15: Concurrent Construction Phase 1 Parking Demand

Site	Retail	Hotel	Construction	Total Demand	Total Supply
North	-	-	-	-	232
Fairfield	-	171	60	231	-
South/Aloft	-	119	-	119	165
Total Overall	0	290	60	350	397



Once Phase 1 is completed, the Fairfield site will have 215 parking spaces. Because construction of Phase 2 and 3 occur concurrently under this scenario, the newly constructed garage for the Fairfield Hotel under Phase 1 will be the only parking available. Peak parking demand is estimated to occur on a weekday in June at 8:00 AM during the concurrent construction of Phase 2 and 3. A peak demand of 171 parking spaces for the Fairfield Hotel and newly constructed retail and 119 parking spaces for the Aloft hotel will need to be accommodated, along with a peak demand of 150 construction employee parking spaces. As shown in **Table 16**, the total demand of 442 spaces cannot be accommodated by the 215 parking spaces supplied, with a deficit of 227 spaces.

In order to accommodate the excess demand in parking during the concurrent construction of Phase 2 and 3, sufficient off-site parking with transport to and from the project site would need to be provided for hotel guests and employees, and construction employees.

Table 16: Concurrent Construction Phase 2/3 Parking Demand

Site	Retail	Hotel	Construction	Total Demand	Total Supply
North	-	-	75	75	-
Fairfield	2	171	-	173	215
South/Aloft	-	119	75	194	-
Total Overall	2	290	150	442	215

APPENDIX A:
COUNT SHEETS

Parking Study

Location: 475 North/525 North Pacific Coast Highway
City: El Segundo, LA

Date: 5/2/2019
Day: Thursday

Lot	Restriction	2:00 AM
North	Regular	123
North	Handicap	0
Fairfield	Regular	17
Fairfield	Handicap	2
Aloft	Regular	98
Aloft	Handicap	2

Parking Study

Location: 475 North/525 North Pacific Coast Highway

City: El Segundo, LA

Date: 5/5/2019

Day: Sunday

Lot	Restriction	2:00 AM
North	Regular	158
North	Handicap	1
Fairfield	Regular	13
Fairfield	Handicap	2
Aloft	Regular	91
Aloft	Handicap	2

APPENDIX B:
SHARED PARKING ANALYSIS WORKSHEETS

**Project Sitewide Peak Hour Parking Demand Determination
Appendix B**

Weekday Estimated Peak-Hour Parking Demand

Site	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
North	189	194	200	201	203	203	204	204	204	204	204	213	223	242	241	240	238	227	213
Fairfield	149	154	173	159	150	152	146	146	153	152	160	169	177	177	182	177	191	195	181
South	280	294	313	308	305	307	304	301	298	295	300	323	337	353	358	350	357	350	320
Total	618	642	686	668	658	662	654	651	655	651	664	705	737	772	781	767	786	772	714

Weekend Estimated Peak-Hour Parking Demand

Site	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
North	189	199	199	201	202	203	203	204	204	204	204	213	222	241	241	240	238	228	213
Fairfield	149	155	173	159	149	151	145	145	153	153	161	168	175	175	181	177	191	195	181
South	276	292	309	307	306	306	304	300	301	294	300	319	335	351	353	343	350	343	316
Total	614	646	681	667	657	660	652	649	658	651	665	700	732	767	775	760	779	766	710

June																				
North Site - Weekday Estimated Peak-Hour Parking Demand																				
		6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
Community Shopping Center (<400 ksf)	67%	-	-	1	1	3	3	4	4	4	4	4	4	4	4	3	2	1	-	-
Employee	80%	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-
Residential Demand	100%	160	144	136	128	120	112	104	112	112	112	120	136	144	155	157	158	160	160	160
Reserved	100%	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189
Guest	100%	-	5	10	10	10	10	10	10	10	10	10	19	29	48	48	48	48	38	24
TOTAL DEMAND	Customer	-	-	1	1	3	3	4	4	4	4	4	4	4	4	3	2	1	-	-
	Employee	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-
	Reserved	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189
	Guest	-	5	10	10	10	10	10	10	10	10	10	19	29	48	48	48	48	38	24
		189	194	200	201	203	203	204	204	204	204	204	213	223	242	241	240	238	227	213

June																				
North Site - Weekend Estimated Peak-Hour Parking Demand																				
		6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
Community Shopping Center (<400 ksf)	67%	-	-	-	1	2	3	3	4	4	4	4	4	3	3	3	2	1	1	-
Employee	80%	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-
Residential Demand	100%	160	144	136	128	120	112	104	112	112	112	120	136	144	155	157	158	160	160	160
Reserved	100%	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189
Guest	100%	-	10	10	10	10	10	10	10	10	10	10	19	29	48	48	48	48	38	24
TOTAL DEMAND	Customer	-	-	-	1	2	3	3	4	4	4	4	4	3	3	3	2	1	1	-
	Employee	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-
	Reserved	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189
	Guest	-	10	10	10	10	10	10	10	10	10	10	19	29	48	48	48	48	38	24
		189	199	199	201	202	203	203	204	204	204	204	213	222	241	241	240	238	228	213

June																				
Fairfield Site - Weekday Estimated Peak-Hour Parking Demand																				
		6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
Community Shopping Center (<400 ksf)	67%	-	-	1	2	4	5	6	6	6	5	5	6	6	6	5	3	2	1	-
Employee	80%	-	-	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	-	-
Hotel-Business	100%	146	138	123	108	92	92	85	85	92	92	100	108	116	116	123	131	146	154	154
Employee	100%	3	16	48	48	53	53	53	53	53	53	53	53	53	53	53	42	42	40	27
TOTAL DEMAND	Customer	146	138	124	110	96	97	91	91	98	97	105	114	122	122	128	134	148	155	154
	Employee	3	16	49	49	54	55	55	55	55	55	55	55	55	55	54	43	43	40	27
	Reserved	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ULI Base Data Has Been Modified.		149	154	173	159	150	152	146	146	153	152	160	169	177	177	182	177	191	195	181

June																				
Fairfield Site - Weekend Estimated Peak-Hour Parking Demand																				
		6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
Community Shopping Center (<400 ksf)	67%	-	-	1	2	3	4	5	5	6	6	6	5	5	5	4	3	2	1	-
Employee	80%	-	-	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	-	-
Hotel-Business	100%	146	139	123	108	92	92	85	85	92	92	100	108	116	116	123	131	146	154	154
Employee	100%	3	16	48	48	53	53	53	53	53	53	53	53	53	53	53	42	42	40	27
TOTAL DEMAND	Customer	146	139	124	110	95	96	90	90	98	98	106	113	121	121	127	134	148	155	154
	Employee	3	16	49	49	54	55	55	55	55	55	55	55	54	54	54	43	43	40	27
	Reserved	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ULI Base Data Has Been Modified.		149	155	173	159	149	151	145	145	153	153	161	168	175	175	181	177	191	195	181

June																				
South Site - Weekday Estimated Peak-Hour Parking Demand																				
		6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
Community Shopping Center (<400 ksf)	67%	-	-	1	1	2	3	3	3	3	3	3	3	3	3	2	1	-	-	
Employee	80%	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	
Family Restaurant	95%	6	12	14	18	20	21	24	21	12	11	11	18	19	19	19	14	13	12	6
Employee	100%	4	5	6	6	7	7	7	7	7	5	5	7	7	7	7	6	5	5	2
Hotel-Business	100%	103	97	86	76	65	65	59	59	65	65	70	76	81	81	86	92	103	108	108
Employee	100%	2	11	33	33	37	37	37	37	37	37	37	37	37	37	37	30	30	28	19
Residential Reserved	100%	144	130	122	115	108	101	94	101	101	101	108	122	130	140	141	143	144	144	144
Reserved	100%	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
Guest	100%	-	4	8	8	8	8	8	8	8	8	8	16	24	40	40	40	40	32	20
TOTAL DEMAND	Customer	109	109	101	95	87	89	86	83	80	79	84	97	103	103	108	108	117	120	114
	Employee	6	16	39	40	45	45	45	45	45	43	43	45	45	45	45	37	35	33	21
	Reserved	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
	Guest	-	4	8	8	8	8	8	8	8	8	8	16	24	40	40	40	40	32	20
ULI Base Data Has Been Modified.		280	294	313	308	305	307	304	301	298	295	300	323	337	353	358	350	357	350	320

June																				
South Site - Weekend Estimated Peak-Hour Parking Demand																				
		6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
Community Shopping Center (<400 ksf)	67%	-	-	-	1	2	2	3	3	3	3	3	3	3	3	2	2	1	1	-
Employee	80%	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	
Family Restaurant	95%	2	6	11	17	21	21	24	20	15	10	11	14	17	17	15	7	6	4	2
Employee	100%	4	5	6	6	7	7	7	7	7	5	5	7	7	7	7	6	5	5	2
Hotel-Business	100%	103	97	86	76	65	65	59	59	65	65	70	76	81	81	86	92	103	108	108
Employee	100%	2	11	33	33	37	37	37	37	37	37	37	37	37	37	37	30	30	28	19
Residential Reserved	100%	144	130	122	115	108	101	94	101	101	101	108	122	130	140	141	143	144	144	144
Reserved	100%	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
Guest	100%	-	8	8	8	8	8	8	8	8	8	8	16	24	40	40	40	40	32	20
TOTAL DEMAND	Customer	105	103	97	94	88	88	86	82	83	78	84	93	101	101	103	101	110	113	110
	Employee	6	16	39	40	45	45	45	45	45	43	43	45	45	45	45	37	35	33	21
	Reserved	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
	Guest	-	8	8	8	8	8	8	8	8	8	8	16	24	40	40	40	40	32	20
ULI Base Data Has Been Modified.		276	292	309	307	306	306	304	300	301	294	300	319	335	351	353	343	350	343	316

PACIFIC COAST COMMONS SHARED PARKING DEMAND SUMMARY (NORTH SITE)

PEAK MONTH: JUNE -- PEAK PERIOD: 10 PM, WEEKDAY

Projected Parking Supply: 241 Stalls			Weekday					Weekday		
Land Use	Project Data		Base Rate	Mode Adj	Non-Captive Ratio	Project Rate	Unit	Peak Hr Adj	Peak Mo Adj	Estimated Parking Demand
	Quantity	Unit						10 PM	June	
Community Shopping Center (<400 ksf)	2,223	sf GLA	2.67	1.00	1.00	2.67	/ksf GLA	0.30	0.67	1
Employee			0.66	1.00	1.00	0.66	/ksf GLA	0.40	0.80	0
Residential Demand	137	units	1.17	1.00	1.00	1.17	/unit	1.00	1.00	160
Reserved	1.38	sp/unit	1.38	1.00	1.00	1.38	/unit	1.00	1.00	189
Guest	143	units	0.33	1.00	1.00	0.33	/unit	1.00	1.00	48
ULI base data have been modified from default values.								Customer		1
								Employee		0
								Residential Reserved		189
								Residential Guest		48
								Total		238

PACIFIC COAST COMMONS SHARED PARKING DEMAND SUMMARY (FAIRFIELD SITE)

PEAK MONTH: JUNE -- PEAK PERIOD: 10 PM, WEEKDAY

Projected Parking Supply:		215 Stalls		Weekday				Weekday		
Land Use	Project Data		Base Rate	Mode Adj	Non-Captive Ratio	Project Rate	Unit	Peak Hr Adj	Peak Mo Adj	Estimated Parking Demand
	Quantity	Unit						10 PM	June	
Community Shopping Center (<400 ksf)	3,273	sf GLA	2.67	1.00	1.00	2.67	/ksf GLA	0.30	0.67	2
Employee			0.66	1.00	1.00	0.66	/ksf GLA	0.40	0.80	1
Hotel-Business	350	rooms	0.44	1.00	1.00	0.44	/rooms	0.95	1.00	146
Employee			0.15	1.00	1.00	0.15	/rooms	0.80	1.00	42
ULI base data have been modified from default values.								Customer		148
								Employee		43
								Total		191

PACIFIC COAST COMMONS SHARED PARKING DEMAND SUMMARY (SOUTH SITE)

PEAK MONTH: JUNE -- PEAK PERIOD: 10 PM, WEEKDAY

Projected Parking Supply: 336 Stalls			Weekday					Weekday		
Land Use	Project Data		Base Rate	Mode Adj	Non-Captive Ratio	Project Rate	Unit	Peak Hr Adj	Peak Mo Adj	Estimated Parking Demand
	Quantity	Unit						10 PM	June	
Community Shopping Center (<400 ksf) Employee	2,056	sf GLA	2.67	1.00	1.00	2.67	/ksf GLA	0.30	0.67	1
			0.66	1.00	1.00	0.66	/ksf GLA	0.40	0.80	0
Family Restaurant Employee	3,700	sf GLA	6.67	1.00	1.00	6.67	/ksf GLA	0.55	0.95	13
			2.00	1.00	1.00	2.00	/ksf GLA	0.65	1.00	5
Hotel-Business Employee	246	rooms	0.44	1.00	1.00	0.44	/rooms	0.95	1.00	103
			0.15	1.00	1.00	0.15	/rooms	0.80	1.00	30
Residential Demand	120	units	1.20	1.00	1.00	1.20	/unit	1.00	1.00	144
	1.38	sp/unit	1.38	1.00	1.00	1.38	/unit	1.00	1.00	165
	120	units	0.33	1.00	1.00	0.33	/unit	1.00	1.00	40
ULI base data have been modified from default values.								Customer		117
								Employee		35
								Residential Reserved		165
								Residential Guest		40
								Total		357

